

MassDOT

Green Line Extension Project Sunk Cost Analysis

February 29, 2016



GLX: Public Meetings

- In order to solicit public input and suggestions, MassDOT and the T will host a series of meetings at the following dates and locations:

Wednesday, March 2nd, Arts at the Armory in Somerville

Wednesday, March 23rd, Tufts University in Medford

Wednesday, April 13th, Argenziano School in Somerville

Wednesday, April 27th, St. Anthony's Parish Hall in Cambridge;

Thursday, May 5th, St. Clement's Parish Hall in Medford

- For each meeting, an open house will be held from 5:30 to 6:30 p.m., with the presentation and Q &A to immediately follow from 6:30 to 8:00 p.m.

- Questions about the project may be submitted to info@glxinfo.com



Sunk Cost Summary

| Cost Center | Spent To-Date | To-Go Spending | Total Spending |
|-----------------------|----------------------|----------------------|----------------------|
| Professional Services | \$198,902,389 | \$17,039,000 | \$215,941,389 |
| Real Estate | \$67,947,489 | \$25,418,516 | \$93,366,005 |
| Construction | \$148,207,415 | \$54,243,962 | \$202,451,377 |
| Force Accounts | \$5,800,000 | \$500,000 | \$6,300,000 |
| Subtotal | \$420,857,293 | \$97,201,478 | \$518,058,771 |
| Vehicles | \$24,248,409 | \$158,402,505 | \$182,650,914 |
| Total | \$445,105,702 | \$255,603,983 | \$700,709,685 |

To-Go spending includes assumptions for claims, contract close out costs, and contingencies.

No assumption is made concerning litigation risk.

Sunk Costs – A Definition

- For the purpose of this analysis, sunk costs include items paid to-date, accruals for ongoing work, and estimated costs to complete ongoing construction in the event that the Board votes to cancel the project in May.
- We have reviewed all ongoing construction contracts and are eliminating scope where possible. If the Board's ultimate decision is to move forward with the project, much of that scope may need to be added back into future contracts.
- For the purpose of this analysis, costs centers include professional services, vehicles, real estate, construction, and force accounts.

Sunk Costs – Total Amount

- To-date, we have spent approximately \$445.1 million on the Green Line Project.
- Some portion of the unspent funds on existing contracts will need to be spent even if the Board opts to cancel the overall project at its meeting on May 11th (e.g., construction is ongoing and vehicles are being manufactured).
- Based upon current assumptions, the project's sunk costs could increase by as much as \$255.6 million, **yielding a total sunk cost of \$700.7 million, of which \$182.7 million would be spent to acquire 24 new Green Line vehicles and \$518 million would be remaining sunk costs.**

Professional Services

- The estimated sunk costs for professional services total approximately \$215.9 million.
- These costs include costs spent for the original project, the look back analysis, the current redesign effort, and ongoing construction management:
 - The five firms on the original GLX team: \$195.3 million
 - The professional services for the look-back analysis: \$2.0 million
 - New professional services for the current go/no-go analysis: \$3.2 million*
 - New professional services for ongoing construction: \$8.1 million
 - MBTA project administration: \$7.2 million

*Does not include \$2 million for redesign work that is being performed by the original design team and which is included in the \$195.3 million.

- To-date, we have spent approximately \$198.9 million for professional services.

Vehicles

- The Green Line Project includes the purchase of 24 new vehicles necessary to operate the service. Given our existing vehicle needs, we propose to continue with the purchase of these vehicles even if the project does not move forward.
- The current cost estimate for this vehicle procurement is \$182.7 million and includes:
 - Professional services: \$26.1 million
 - Manufacturing: \$118.1 million
 - MBTA Project Administration: \$5.3 million
 - Force Accounts: \$7.0 million
 - Contingency: \$26.2 million
- To-date, we have spent approximately \$24.2 million on vehicle procurement.

Real Estate

- To date, the Green Line Project has acquired sixteen properties, eight of which require business relocation. Also, numerous license agreements have been executed to obtain temporary property rights.
- The sunk cost for Green Line real estate is approximately \$93.4 million:
 - Acquisitions: \$41.1 million
 - Relocation: \$43.6 million
 - Professional Services (including MBTA staff time): \$1.7 million
 - Settlement Contingency: \$7.1 million
- To-date, we have spent approximately \$67.9 million on real estate.

Construction

- There were five construction contracts awarded for the Green Line Project prior to the decision to reassess the project's viability in December.
- The current value of these contracts is approximately \$228.8 million. Staff has reviewed each of these contracts and identified scope to delete based upon the assumption that the project is not going forward.
- Based upon this review, the sunk cost for these construction contracts, is approximately \$202.5 million, for an overall savings of \$26.3 million.
- Much of these savings would be added back into future contracts should the Board ultimately vote to move forward with a redesigned project.

Force Accounts

- The MBTA uses force accounts for work associated with construction contracts that, due to the nature of the work or existing regulatory or contractual requirements, can only be performed by specified entities. Examples of this type of work include utility relocations, flagging on active rail lines, work performed by MBTA operations.
- The sunk cost estimated for force account charges on the Green Line is approximately \$6.3 million, of which \$5.8 million has been spent to-date.